



PATENT ABSTRACTS OF JAPAN

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G08B 17/10(21) Application number: **09350430**(71) Applicant: **FUJI ELECTRIC CO LTD**(22) Date of filing: **19.12.97**(72) Inventor: **NAGASE NORIYOSHI**(54) **GAS DETECTOR**

measuring accuracy.

(57) Abstract:

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PROBLEM TO BE SOLVED: To obtain a gas detector applicable to a situation where the ambient temperature varies over a wide range without sacrifice of measuring accuracy by setting the reference voltage of a differential amplifier automatically depending on the temperature sensor output.

SOLUTION: Output from a bridge circuit constituted of a gas sensor 1 and fixed resistors 3, 4 is delivered to a differential amplifier circuit 6. A converter 8 converts a temperature sensor 2 output into a corresponding electric signal being applied to the circuit 6 as a reference voltage. More specifically, reference voltage of the differential amplifier circuit 6 is set automatically depending on the temperature sensor 2 output. The sensor 2 output is A/D converted and fed through the circuit 6 to a microcomputer 5 where specified operations are effected. When reference voltage of the circuit 6 is set automatically depending on the sensor 2 output, entire range of the A/D converter can be assigned to gas sensitivity and a situation where the ambient temperature varies over a wide range can be dealt with without sacrifice of

